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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,606	07/17/2002	Shusaku Okamoto	5077-000092	6923

27572 7590 04/21/2006

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EXAMINER

MACKOWEY, ANTHONY M

ART UNIT PAPER NUMBER

2624

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,606

Applicant(s)

OKAMOTO ET AL.

Examiner

Anthony Mackowey

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 7-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment filed January 26, 2006 has been entered and made of record.

Election/Restrictions

Newly submitted claims 13 and 14 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Group I, claim(s) 2-6, drawn to displaying a synthesized image in which an enlargement ratio is relatively higher in a nearby area of the vehicle.

Group II, claim(s) 13 and 14, drawn to projecting a camera image onto a bowl model and generating a synthesized image by viewing said projected camera image from a virtual viewpoint.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I as claimed lacks the projection of the camera image onto a bowl model and viewing said projected camera image from a virtual viewpoint, which Examiner believes to be the special technical features of Group II. Group II as claimed lacks the display of a synthesized image in which an enlargement ratio is relatively higher in a nearby area of the vehicle which Examiner believes to be the special technical feature of Group I.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 13 and 14 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Response to Arguments

Applicant's arguments, see page 9, lines 14-17, filed January 26, 2006, with respect to the objection to the Abstract have been fully considered and are persuasive. The objection to the Abstract has been withdrawn.

Applicant's arguments, see page 10, lines 1-6, filed January 26, 2006, with respect to the rejection of claims 2-5 under 35 USC 112, 2nd paragraph, have been fully considered and are persuasive. The rejection of claims 2-5 under 35 USC 112, 2nd paragraph has been withdrawn.

Applicant's arguments filed January 26, 2006, with respect to the rejection of claims 2-5 under 35 USC 103(a) and the rejection of claim 6 under 35 USC 102(b), have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Claim Objections

Claim 2 is objected to because of the following informalities: It appears an attempt was made to amend line 7 of claim 2 to recite "enlargement ratio," however "reduction" has been erroneously underlined instead of strike-through. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 6 is rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,580,373 to Ohashi.

Regarding claim 6, Ohashi discloses a monitoring system (col. 1, lines 5-10) comprising:
one or more cameras for capturing surrounding state of a vehicle (Figs 12-15, 22-25; col. 8, lines 51-67; col. 10, line 18 – col. 13, line 42, Ohashi teaches single and multiple cameras mounted on a vehicle for capturing the area around a vehicle); and

an image processing unit for receiving, as an input, a camera image of said one or more cameras and generating a synthesized image from said camera image to be displayed on a display device (Fig. 4, col. 6, lines 47-65),

wherein at least one camera out of said one or more cameras is installed to have a camera range at least including part of a tire of the vehicle (Fig. 16; col. 8, lines 60-67, Ohashi teaches the camera can capture an image of a track of the wheel.), and

said image processing unit generates, from a camera image of said at least one camera, said synthesized image in such a manner that said tire is imaged therein (Fig. 16, col. 5, lines 14-17; col. 8, lines 60-67, Ohashi teaches the displayed image includes a tire.).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,580,373 to Ohashi in view of USPN 6,259,359 to Fujinami et al. (Fujinami).

Regarding claim 2, Ohashi discloses a monitoring system (col. 1, lines 5-10) comprising:
one or more cameras for capturing surrounding state of a vehicle (Figs 12-15, 22-25; col. 8, lines 51-67; col. 10, line 18 – col. 13, line 42, Ohashi teaches single and multiple cameras mounted on a vehicle for capturing the area around a vehicle); and

an image processing unit for receiving, as an input, a camera image of said one or more cameras and generating, from said camera image, a synthesized image to be displayed on a display device (Fig. 4, 24 and 25; col. 6, lines 47-65; col. 10, line 64 – col. 13, line 42),

wherein said image processing unit has a mode for displaying a synthesized image including grounding portions of at least both front and rear tires of left or right side of the vehicle (Figs. 2, 3, 6, 7, 16 and 23; col. 6, lines 3-39; col. 8, lines 28-39 and 60-67; col. 10, lines 18-63, Ohashi teaches cameras mounted toward the front or rear of the vehicle for capturing a grounding portion and front or rear tires of the left or right side of the vehicle. Ohashi further discloses the use of the cameras together which would clearly obtain images of the grounding portions of both the front and rear tires of the left or right side of the vehicle.).

Fig. 16 of Ohashi clearly shows in an enlarged view of the nearby area of vehicle including a tire of the vehicle but Ohashi does not explicitly recite displaying a synthesized image in which an enlargement ratio is relatively higher in a nearby area of the vehicle including a grounding portion of both front and rear tires of the left or right side of the vehicle than in a peripheral area of the vehicle. However, Fujinami teaches vehicle monitoring system that enlarges the lower portion (nearby area) of the image (Fig. 3; col. 2, lines 51-67; col. 3, lines 34-37; col. 8, lines 12-23; col. 9, lines 35-45).

The teachings of Ohashi and Fujinami are combinable because they are both concerned with image processing and vehicle monitoring systems. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the system taught by Ohashi to include an enlargement ratio which is relatively higher in a nearby area of the vehicle as taught by Fujinami in order to improve visibility in the nearby area (Fujinami, col. 8, lines 12-23).

Regarding claim 3, Fujinami further teaches the enlargement ratio becomes lower in a direction from said nearby area of the vehicle to said peripheral area of the vehicle in said synthesized image (Fig. 3; col. 9, lines 35-45, Fujinami teaches continuously changing the refraction index from the upper portion to the bottom, thus portions of the upper portion (peripheral area) are enlarged less than those in the bottom (nearby area)).

Regarding claim 4, said image processing unit generates said synthesized image in such a manner that an area along a side surface of the vehicle has linearity (Fig. 16, It can be clearly seen that the displayed area along the side surface of the vehicle is straight without curving (has linearity)).

Regarding claim 5, at least one camera out of said one or more cameras is installed to have a camera range at least including part of a body side surface and part of a front tire (Fig. 16; col. 6, lines 33-39; col. 8, lines 60-67, Ohashi teaches capturing an image of the front tire. It can clearly be seen the displayed image contains part of the body side surface of the car and the front tire.), and

said image processing unit generates, from a camera image of said at least one camera, said synthesized image in such a manner that said body side surface and said front tire are imaged therein (Fig. 16; col. 6, lines 33-39; col. 8, lines 60-67, Ohashi teaches capturing an image of the front tire. It can clearly be seen the displayed image contains part of the body side surface of the car and the front tire.).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Mackowey whose telephone number is (571) 272-7425. The examiner can normally be reached on M-F 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AM
4/16/06

WENPENG CHEN
PRIMARY EXAMINER

